Annexure-V(C) - Revised/Amended

Revised/Amended Technical Specifications of Android OS Based integrated Spot Billing Devices (SBD):

Revised/Amended Specification		
Sl No	Parameter	Specifications as under or Higher
1	Display	Form factor-Bar, Screen type- Touch screen, Screen size-min of 4 inches, resolution-min of 480X 584, No. of colours-min of 16M
2	Processor	Quad core, cumulative speed at min of 4 GHz or above
3	RAM & Memory	RAM min 3 GB. Internal memory of min 8 GB with extendable up to min of 32 GB
4	Camera Features	At least 8.0MP Rear camera with Auto focus; with LED light. 2.0 MP front camera:
5	General Features	Android OS 12 or higher version (all up to date security patches) with Bluetooth 4.0 or higher features, messaging, GPS, USB connector, OCR, NFC permanent metallic sticker etc.
6	Data	3G/4G or higher, Wifi 802.11 b/g/n
7	Sound	Media player for audio and video
8	Battery	Type- Li-Ion/ Li-Polymer, Capacity- Min of 6000mAH, supports dismounting, stand by time 72 hours, operating time 12 hours, generation of Min 500 bills (each bill of 10 inch length) per charge.
9	Miscellaneous features	All other features to be disabled and only the required app to be enabled.
10	Fingerprint sensor/ Biometric	Sensor-FRC 101 IFI, processor FPC 202 OQ (64 pin QFN9*9mm)
11	GPS	Built-in GPS, support A-GPS
12	IOT Functions	**1D Barcode:** Code 128, EAN-13, EAN-8, Code39, UPC-A,UPC-E, Codabar ISBN/ISSN, Code93,UCC/EAN-128, GS1 Databar, HIBC or latest
		2D Bar code: Built -In QR, PDF417 Code 128, EAN-13, EAN-8, Code39, UPC-A, UPC-E, Code bar, Interleaved 2 of 5, ISBN/ ISSN, Code93, UCC/EAN-128 or latest
		RFID/NFC Permanent metallic Sticker:
		Fully support NFC, 13.56MHz (ISO14443A/B,15693 Protocol), Reading distance 2~ 5cm.

		Support UHF RFID (EPC C1/G2, 18000- 6 protocol), reading and writing tags (optional) 2.4GHz active RFID module, reading distance can reach 30~ 50m (optional)
13	Printer	3 inch integrated thermal printer with minimum 10 meter paper roll load capacity. Velocity: 15mm/s
14	Software	SBD should have a customizable utility billing software

The device should be a single piece system, with the printer integrated at the PCB/board level
The SBD should also support following features / functionality:
Real Time (on-line) spot billing as per KERC tariff order and relevant data exchange.
Real Time spot collection by cash /DD /cheque /UPI Payment modes and relevant exchange.
Auto meter reading download from optical port / Bluetooth device / RF&IR / OCR.
Display and generation of disconnection list, capturing disconnection details and auto upload.
Display and generation reconnection list, Capturing reconnection details & auto upload.
Reports (Summary / detail)
SBD software should be customizable for the utility billing application (including Spot collection, disconnection and reconnection)
Capturing DTR reading and DTR wise Energy Auditing.

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